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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,703	10/29/2003	Hitoshi Motose	FS.20122US0A	5539
20995	7590	10/18/2005	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			STONE, JENNIFER A	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			2636	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/695,703	Applicant(s) MOTOSE ET AL.	
	Examiner Jennifer A. Stone	Art Unit 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on October 29, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1. ☒ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Drawings

1. The objection to the drawing (figure 1, item 16) is withdrawn because item 16 is text labeled in figure 2.

Claim Rejections - 35 USC § 112

2. The rejections to claims 2, 3, 11-13, 17, 18, 26-28, 32, 33, and 41-43 are withdrawn due to the amendments. The claim limitations are now in definite form.

Claim Rejections - 35 USC § 103

- 3 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 4 Claims 16 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (US 4,970,492), and further in view of Draxler et al. (US 4,768,471).

For claim 16, King discloses a method for determining when a lubricant no longer possesses proper lubricant properties, the lubricant lubricating at least one movable member within an internal combustion engine (col 1, lns 7-10), the internal combustion engine being controlled by a control unit (col 2, lns 43-46; col 3, lns 29-32; Fig. 1, item 100), the control unit comprising a lubricant service monitoring system (col 3, lns 35-38), at least one memory allocation and a perceptible alarm (col 5, lns 49-57; Fig. 1, items 110, 120, 130, 140, and 200), the method comprising the lubricant service monitoring

system recording an engine operating time value into the memory allocation and activating the perceptible alarm when the allocated engine operating time value exceeds a predetermined value (col 4, lns 54-68; col 5, lns 1-3). However, King does not disclose activating the perceptible alarm when the engine is being started. Draxler, on the other hand, discloses activating the perceptible alarm when the engine is being started and if the allocated engine operating time value exceeds a predetermined value (col 1, lns 5-7; col 4, lns 22-47). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to activate an alarm after a delay period in order to prevent a false alarm at initial startup of the engine when the engine oil pressure is zero.

For claim 26, King discloses the engine operating time value allocated in the memory is configured to be reset (col 3, lns 35-40 and 49-51; Fig. 1, item 170).

5. Claims 31 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (US 4,970,492), and further in view of Draxler et al. (US 4,768,471).

For claim 31, King discloses a machine comprising an internal combustion engine, the internal combustion engine comprising an engine body, a movable member relative to the engine body and a lubrication system (col 1, lns 7-16), the lubrication system comprising a lubricant used to lubricate at least one movable member, a control system comprising a lubricant service monitoring system (col 3, lns 35-38), the lubricant service monitoring system comprising a timer (col 3, lns 35-37), at least one memory allocation (col 5, lns 49-57; Fig. 1, items 110, 120, 130, 140), and an alarm (Fig. 1, 200), the timer recording an engine operating time value (col 3, lns 35-38), the memory

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allocation holding the engine operating time value (col 5, lns 53-55; Fig. 1, item 120), an alarm unit responsive to output a perceptible alarm when a predetermined engine operating time value limit has been reached (col 4, lns 54-68; col 5, lns 1-3). However, King does not disclose activating the perceptible alarm when the engine is being started. Draxler, on the other hand, discloses activating the perceptible alarm when the engine is being started and if the engine operating time value has exceeded a predetermined engine operating time value limit (col 1, lns 5-7; col 4, lns 22-47). It would have been obvious to activate an alarm after a delay period in order to prevent a false alarm at initial startup of the engine when the engine oil pressure is zero.

For claim 41, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 26 as stated above.

6 Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (US 4,970,492), and further in view of Draxler et al. (US 4,768,471).

For claim 1, King discloses an internal combustion engine, the internal combustion engine comprising an engine body (col 1, lns 7-10), a movable member movable relative to the body and a lubrication system (an engine comprises many movable parts), the lubrication system comprising a lubricant used to lubricate at least the movable member (col 2, lns 39-43), a control system comprising a lubricant service monitoring system (col 3, lns 35-38) comprising a timer (col 3, lns 33-35), at least one memory allocation, and an alarm (col 5, lns 49-57; Fig. 1, items 110, 120, 130, 140, and 200), the timer being configured to record an engine operating time value (col 3, lns 35-38), the memory allocation being configured to hold the engine operating time value (col

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5, Ins 53-55; Fig. 1, item 120), an alarm unit responsive to output a perceptible alarm when predetermined engine operating time value have been exceeded (col 4, Ins 54-68; col 5, Ins 1-3). King, however, does not disclose a watercraft internal combustion engine that activates the perceptible alarm when the engine is being started. Draxler, on the other hand, discloses activating a watercraft internal combustion engine's perceptible alarm when the engine is being started if the engine operating time value has exceeded a predetermined engine operating time value limit (col 1, Ins 5-7; col 4, Ins 22-47). It would have been obvious to activate an alarm after a delay period in order to prevent a false alarm at initial startup of the engine when the engine oil pressure is zero. In addition, it would have been obvious to include a lubrication system for all types of engines, regardless of their particular application; lubricating all moving parts of an engine is critical to optimal engine performance and extends the life of an engine.

For claim 11, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 26 as stated above.

7. Claims 2-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over King and Draxler, and further in view of Vajgart et al. (US 5,060,156).

For claim 2, King discloses outputting a perceptible alarm, but not at a predetermined frequency. Vajgart, however, discloses outputting a perceptible alarm at a predetermined frequency (col 12, Ins 7-10). It would have been obvious to flash the alarm at a predetermined frequency so that a degree of urgency is communicated to an operator in order to take appropriate action.

For claim 3, King discloses outputting a perceptible alarm, but not at a predetermined frequency. Vajgart, discloses outputting an alarm frequency that is configured to increase at a rate proportionate to the predetermined engine operating time value limits (col 4, lns 57-62; col 10, lns 66-68; col 11, lns 1-4; 45-52; col 12, lns 7-10). The Accumulated Smart Sparks Value is based on engine operating characteristics, temperature, and time of continuous engine operation above a predetermined speed. It would have been obvious to flash the alarm at a rate proportionate to engine operating time value limits so that multiple levels of urgency are communicated to an operator in order to take appropriate action.

For claim 4, King does not disclose an audible alarm; however, Draxler discloses this feature (col 2, lns 18-20; Fig. 2, item 28). It would have been obvious to include an audible alarm so that an operator acknowledges an alarm condition, while not having to focus on the visual alarm display.

For claim 5, King discloses a perceptible visual alarm (Fig. 1, item 200).

For claim 6, King discloses a visual alarm to comprise at least one light (Fig. 1, item 240).

For claim 7, King discloses a visual alarm to comprise at least one colored light (Fig. 1, item 240).

For claim 8, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 5 as stated above.

For claim 9, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

For claim 10, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 7 as stated above.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over King and Draxler, and further in view of Tharman et al. (US 6,542,074).

King discloses that the system is reset, but does not disclose whether the perceptible alarm is reset. However, Tharman discloses the feature of resetting the perceptible alarm (Fig. 3, item 155; col 3, lns 41-45; col 5, lns 42-46; col 6, lns 20-25).

9. Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (US 4,970,492) and Draxler, as applied to claim 1, and further in view of Knight (US 6,276,975).

King is not specific about the type of memory allocation; however, Knight discloses a watercraft alarm where the memory allocation comprises RAM and EEPROM (col 1, lns 41-43; col 4, lns 34-45; Fig. 1, item 300). It would have been obvious to include RAM and EEPROM so that memory parameters are modified and stored upon an individual's preferences.

10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over King, Draxler, and Knight, as applied to claim 13, and further in view of Vajgart (US 5,060,156).

King updates the values in storage, such as the engine operating time, but does not disclose updating RAM with the engine operating time at a predetermined frequency. However, Vajgart discloses updating RAM at a predetermined frequency (col 2, lns 35-40; col 7, lns 50-55; col 12, lns 7-10; Fig. 7, item 40). It would have been

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obvious to update RAM at a predetermined frequency so that a degree of urgency is saved to memory and communicated along with the warning indicator.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over King, Draxler, and Knight, as applied to claim 13, and further in view of Tharman et al. (US 6,542,074).

King updates the values in storage, such as the engine operating time, but does not disclose updating EEPROM with the engine operating time at a predetermined frequency. However, Tharman discloses updating EEPROM at a predetermined frequency (col 4, lns 13-19; col 5, lns 15-20; col 6, lns 24-42). It would have been obvious to update EEPROM with the engine operating time from RAM at a predetermined frequency so that a degree of urgency is saved to memory and communicated along with the warning indicator.

12. Claims 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over King and Draxler, and further in view of Vajgart et al. (US 5,060,156).

For claim 17, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 2 as stated above.

For claim 18, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 3 as stated above.

For claim 19, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 4 as stated above.

For claim 20, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 5 as stated above.

For claim 21, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

For claim 22, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 7 as stated above.

For claim 23, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 8 as stated above.

For claim 24, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 9 as stated above.

For claim 25, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 10 as stated above.

13. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over King and Draxler, as applied to claim 16, and further in view of Tharman et al. (US 6,542,074).

The claim is interpreted and rejected for the same reasons as stated in the rejection of claim 12 as stated above.

14. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over King (US 4,970,492) and Draxler, and further in view of Knight (US 6,276,975).

King is not specific about the type of memory allocation; however, Knight discloses a watercraft alarm where the memory allocation comprises RAM and EEPROM (col 1, lns 41-43; col 4, lns 34-45; Fig. 1, item 300). It would have been obvious to include RAM and EEPROM so that memory parameters are modified and stored upon an individual's preferences.

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15. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over King, Draxler and Knight, and further in view of Vajgart (US 5,060,156).

The claim is interpreted and rejected for the same reasons as stated in the rejection of claim 14 as stated above.

16. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over King, Draxler, Knight and Vajgart, and further in view of Tharman et al. (US 6,542,074).

The claim is interpreted and rejected for the same reasons as stated in the rejection of claim 15 as stated above.

17. Claims 32-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over King and Draxler, and further in view of Vajgart et al. (US 5,060,156).

For claim 32, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 2 as stated above.

For claim 33, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 3 as stated above.

For claim 34, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 4 and 19 as stated above.

For claim 35, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 5 as stated above.

For claim 36, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

For claim 37, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 7 as stated above.

For claim 38, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 8 as stated above.

For claim 39, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 9 as stated above.

For claim 40, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 10 as stated above.

18. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over King and Draxler, as applied to claim 31, and further in view of Tharman et al. (US 6,542,074).

The claim is interpreted and rejected for the same reasons as stated in the rejection of claim 12 as stated above.

19. Claims 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over King (US 4,970,492) and Draxler, and further in view of Knight (US 6,276,975).

The claim is interpreted and rejected for the same reasons as stated in the rejection of claim 28 as stated above.

20. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over King, Draxler and Knight, and further in view of Vajgart (US 5,060,156).

The claim is interpreted and rejected for the same reasons as stated in the rejection of claim 14 as stated above.

21. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over King, Draxler, Knight and Vajgart, and further in view of Tharman et al. (US 6,542,074).

The claim is interpreted and rejected for the same reasons as stated in the rejection of claim 15 as stated above.

Response to Remarks

22. Applicant's arguments filed September 23, 2005 have been fully considered but they are not persuasive.

The Applicant argues as follows:

King does not disclose the notification (alarm) is issued to the operator when the engine is being started.

Applicant's arguments with respect to claims 1, 16, and 31 have been considered but are moot in view of the new ground(s) of rejection. Even though King does not disclose the notification (alarm) is issued to the operator when the engine is being started, Draxler discloses this feature and also incorporates a delay time before initiating an alarm so both limitations (engine started and time value exceeds a predetermined engine operating time value limit) of the independent claims are met with the combination of King and Draxler.

Conclusion

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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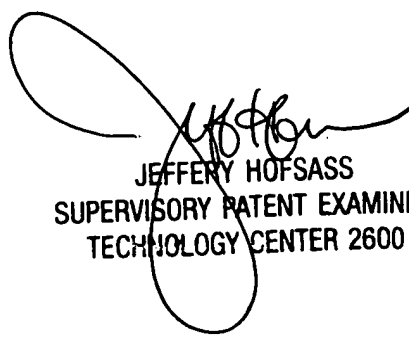
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Stone whose telephone number is (571) 272.2976. The examiner can normally be reached on M-F from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass, can be reached at (571) 272.2981. The fax phone number for the organization where this application or proceeding is assigned is (571) 273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Stone
October 4, 2005



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